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Kensuke Morita

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EXAMINER

LU, KUEN S

ART UNIT

PAPER NUMBER

2156

NOTIFICATION DATE

DELIVERY MODE

04/29/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/585,346	Applicant(s) MORITA, KENSUKE	
	Examiner KUEN S. LU	Art Unit 2156	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-15 and 17-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-15 and 17-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>76/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1.1. The Action is responsive to the Applicant's Application filed July 6, 2006 and Applicant's response, filed March 2, 2009, to election/restriction requirement of January 29, 2009. The response is found persuasive and Examiner hereby withdraws the requirement.

1.2. The claims 1-3, 5-15 and 17-27 have been examined and are pending.

Priority

2. The Applicant claimed to obtain a benefit of the national stage entry of PCT/JP04/00521, international filing date January 22, 2004.

Drawings

3. The drawings in filed July 6, 2006 are considered in compliance with 37 CFR 1.121(d) and are accepted.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on July 6, 2006 was filed before the mailing of a first Office action after the filing of the application. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the Examiner and electronically signed as attached.

Specification

5. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

5.1. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase “Not Applicable” should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A “Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

5.2. Based on the above guidelines, arrangements and sub-titles of paragraphs in the Application Disclosure are not of proper format. Corrections are required.

5.3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code, at Page 1, Specification. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Examples of embedded hyperlink appear on Pages 6 and 22-25. A suggested amendment is, for example, (<<http://www.uspto.gov>>).

5.4. The specification is further objected to because at Page 1, the URL "http://.../sql/." is WEB directory and it is not a pointer to a specific document as described.

5.5. The specification is, again, objected to because at Page 2, filed January 23, 2008 in which an insertion is made optionally. That is, the insertion is made under an OR condition.

5.6. The specification is also objected to because at Page 2, filed January 23, 2008 the PCT number PCT/JP2004/**000**521 looks questionable. Also at error is filing date being missing.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the sixth paragraph of 35 U.S.C. 112:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

6.1. Claims 1-3, 5-9 and 22-24 are rejected over 35 U.S.C. 112, 6th Paragraph as failing to comply with the written description requirement.

As per claims 1-3, 5-9 and 22-24, the claims are partially presumed to invoke or seem to be attempting to invoke 35 U.S.C. 112 6th paragraph in the claims by using "means-plus-function" language. However, the Examiner notes that the "means ~~for~~" for performing these cited functions in the specification appears to be computer program modules. While the claims pass the first test of the three-prong test used to determine invocation of paragraph 6, since no other specific structural limitations are disclosed in

Art Unit: 2156

the specification, the claims do not meet the other tests of the three-prong test.

Therefore, 35 U.S.C. 112 6th paragraph has not been invoked when considering these claims below.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.1. Claims 1-3, 5-15 and 17-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per Claims 1, 9 and 22, the claims represent, respectively, a database operating device comprising a group definition means, a processing control means, a storage setting means and a data management means; an information processing device comprising a group definition means, a processing specifics control means, a storage setting means and a data management means; and a database operating device comprising a group definition means and a processing control means. It is noted that the component means in each claim is comprehended as a software implemented module which is not a specific hardware implemented component by an ordinary skilled in the art. Therefore, the said devices as described are merely software applications. The claim lacks the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a

Art Unit: 2156

composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer”).

As per each dependent claim in the groups (2-3 and 5-8) and (23-24), the claim is included in the statement of rejection but not specifically addressed in the body of the rejection has inherited the deficiencies of their parent claim and has not resolved the deficiencies. Therefore, the dependent claims are rejected based on the same rationale as applied to their parent claim above.

As per claims 10 and 12, the claims, respectively, represents a database operating method comprising steps of defining a processing group, controlling processing, setting a storage area and managing data; and an information processing method comprising steps of defining a processing group and controlling processing specifics, setting a storage area and managing data. it is respectfully noted that the 35 U.S.C. § 101 process steps do not transforms its underlying subject matter to a different state or thing. It is further noted that the 35 U.S.C. § 101 processes do not tie to another statutory category, such as an article or manufacture. Therefore the method is not a patent eligible process under 35 U.S.C. § 101 and the consequence is non-statutory (in re Bilski, Appeal Number 2007-1130, Appeal to the Courts of Appeals for the Federal Circuit Court). Appropriate correction is required.

As per claim 11, the claim is included in the statement of rejection but not specifically addressed in the body of the rejection has inherited the deficiencies of its parent claim and has not resolved the deficiencies. Therefore, the dependent claim is rejected based on the same rationale as applied to their parent claim above.

As per claims 13, 21 and 25, the claims represent programs for a database operating device, an information processing device and a database operating device, respectively, for performing various method steps. The programs are clearly not

Art Unit: 2156

machine or an article of manufacture having physical supporting structure, are not a series of steps or acts to be a process, and nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer”).

As per each dependent claim in the groups (14-15 and 17-20) and (26-27), the claim is included in the statement of rejection but not specifically addressed in the body of the rejection has inherited the deficiencies of their parent claim and has not resolved

Art Unit: 2156

the deficiencies. Therefore, the dependent claims are rejected based on the same rationale as applied to their parent claim above.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

8.1. A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.2. Claims 1-3, 5-15 and 17-27 are rejected under 35 U.S.C. 102(b) as anticipated by Nakagawa et al.: "SOFTWARE DISTRIBUTION AND MAINTENANCE SYSTEM AND METHOD", U.S. Patent 5,835,911, filed 8/21/1995 and issued 11/10/1998, hereafter "Nakagawa".

As per claim 22, Nakagawa teaches "A database operating device for operating a database through processing divided into multiple layers, the processing being one or both of activating processing, which activates processing of another layer, and activated processing, which is activated by the activating processing, one or more of the activated processing operating the database, comprising" (See Fig. 2 and col. 12, line 57 - col. 13, line 31 where user computer sending and receiving data from vendor management database through processing divided into layers of object software units, client program

Art Unit: 2156

units, server program units and management data units in which client program units and server program units are activated by activating processes client object software and generated messages of client program units, respectively);

“a group defining means which defines, for each of the layers, a processing group including one or more of the activating processing” (See col. 87, lines 32-37 where client program units and server program units are grouped); and

“a processing control means which, in accordance with progress of the activating processing included in the processing group and a processing result of database operation processing that is activated by the activating processing included in the processing group, controls at least what operation is performed on the database through the database operation processing” (See Figs. 2, 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message in responding to the request message in which server program unit performs and controls operations on vendor management data comprising of various databases).

As per claim 1, Nakagawa teaches “A database operating device for operating a database through processing divided into multiple layers, the processing being one or both of activating processing, which activates processing of another layer, and activated processing, which is activated by the activating processing, one or more of the activated processing being database operation processing for operating the database,

Art Unit: 2156

comprising” (See Fig. 2 and col. 12, line 57 - col. 13, line 31 where user computer sending and receiving data from vendor management database through processing divided into layers of object software units, client program units, server program units and management data units in which client program units and server program units are activated by activating processes client object software and generated messages of client program units, respectively):

“a group defining means which defines a processing group including one or more of the activating processing” (See col. 87, lines 32-37 where client program units and server program units are grouped); and

“a processing control means which, in accordance with progress of the activating processing included in the processing group and a processing result of the database operation processing that is activated by the activating processing included in the processing group, controls at least what operation is performed on the database through the database operation processing” (See Figs. 2, 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message in responding to the request message in which server program unit performs and controls operations on vendor management data comprising of various databases);

“a storage area setting means which sets, for each of the processing groups, a storage area for the activating processing that is included in the processing group and the activated processing that is activated by the activating processing included in the

Art Unit: 2156

processing group” (See col. 66, lines 48-49 where a storage area is allocated for server program units); and

“a data management means which manages data used for processing included in each of the processing groups in the storage areas that are set to the respective processing groups” (See col. 92, lines 63-66 where vendor process procedure manages vendor management databases).

As per claim 9, Nakagawa teaches “An information processing device for performing given information processing through processing divided into multiple layers, the processing being one or both of activating processing, which activates processing of another layer, and activated processing, which is activated by the activating processing” (See Fig. 2 and col. 12, line 57 - col. 13, line 31 where user computer sending and receiving data from vendor management database through processing divided into layers of object software units, client program units, server program units and management data units in which client program units and server program units are activated by activating processes client object software and generated messages of client program units, respectively) , comprising:

“a group defining means which defines a processing group including one or more of the activating processing” (See col. 87, lines 32-37 where client program units and server program units are grouped); and

“a processing specifics control means which, in accordance with progress of the activating processing included in the processing group and a processing result of the

Art Unit: 2156

activated processing that is activated by the activating processing included in the processing group, controls the specifics of the activated processing” (See Figs. 2, 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message in responding to the request message in which server program unit performs and controls operations on vendor management data comprising of various databases);

“a storage area setting means which sets, for each of the processing groups, a storage area for the activating processing that is included in the processing group and the activated processing that is activated by the activating processing included in the processing group” (See col. 66, lines 48-49 where a storage area is allocated for server program units); and

“a data management means which manages data used for processing included in each of the processing groups in the storage areas that are set to the respective processing groups” (See col. 92, lines 63-66 where vendor process procedure manages vendor program units).

As per claim 2, Nakagawa teaches a database operating device according to claim 1, “wherein the layers are three or more separate layers” (See Fig. 2 and col. 12, line 57 - col. 13, line 31 where user computer sending and receiving data from vendor management database through processing divided into more than three layers of object software units, client program units, server program units and management data units),

Art Unit: 2156

and

“wherein the processing control means further controls, in accordance with the progress of the activating processing included in the processing group and the processing result of the activated processing that is activated by the activating processing included in the processing group but is not database operation processing, processing specifics (contents) of the activated processing that is not database operation processing” (See Fig. 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message by referring to a vendor software library in responding to the request message in which software library is not interpreted as a database).

As per claim 3, Nakagawa teaches a database operating device according to claim 1, further comprising a library means which includes one or more of the database operation processing,

“wherein activating processing that activates the database operation processing activates the database operation processing included in the library means” (See Figs. 2, 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message by referring to a vendor software library in responding to the request message in which software library is the library means).

As per claim 5, Nakagawa teaches a database operating device according to claim 1,

“wherein each one of the activated processing sends a returned value which shows the processing result to the activating processing that activates this activated processing” (See Figs. 2, 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message by referring to a vendor software library in responding to the request message),

“wherein the layers include an interface layer, an application layer, and a database layer” (See Fig. 2, col. 24, lines 48-52 and col. 12, line 57 - col. 13, line 31 where user object software is the interface layer, server program is the application layer while the vendor management data is the database layer),

“wherein the interface layer includes one or more of user interface processing which activates, as the activating processing, in response to external operation, the activated processing that is included in the application layer, and performs processing in accordance with the returned value sent from the activated processing that is activated by the user interface processing” (See col. 16, lines 33-37 where client program unit is activated by user command input),

“wherein the application layer includes one or more of application processing which, as the activating processing and the activated processing, is activated by the interface processing, activates one or more of the database operation processing included in the

Art Unit: 2156

database layer, carries out a service that uses the database in accordance with the returned value sent from the activated database operation processing, and sends a result of the service as the returned value to the user interface processing” (See Fig. 2 and col. 12, line 57 - col. 13, line 31 where user computer sending and receiving data from vendor management database through processing divided into layers of object software units, client program units, server program units and management data units in which client program units and server program units are activated by activating processes client object software and generated messages of client program units, respectively), and

“wherein the database layer includes one or more of the database operation processing which, as the database operation processing, is activated by the application processing, operates the database, and sends a result of the operation of the database as the returned value to the application processing” (See Fig. 2 and col. 12, line 57 - col. 13, line 31 where user computer sending and receiving data from vendor management database through processing divided into layers of object software units, client program units, server program units and management data units in which client program units and server program units are activated by activating processes client object software and generated messages of client program units, respectively; and further at Figs. 2, 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message in responding to the request message in which server program unit performs and controls operations on

vendor management data comprising of various databases).

As per claim 6, Nakagawa teaches a database operating device according to claim 5, wherein the processing control means controls execution of the database operation processing as follows:

“when the application processing included in the processing group activates the database operation processing for the first time, the activated database operation processing is connected to the database” (See col. 6, lines 50-51 where user computers connect to vendor computer teaches logging in user to applications of vendor computer); and

“when the database operation processing that is activated last by the application processing included in the processing group ends, or when the database operation processing fails, the activated database operation processing is disconnected from the database” (See Fig. 22 and col. 9, line 64 – col. 10, line 2 where user computers are terminated).

As per claim 7, Nakagawa teaches a database operating device according to claim 5,

“wherein the processing control means commits to the database a result of the database operation processing activated by the application processing included in the processing group in a case where the database operation processing that is activated last by the application processing included in the processing group is successful” (See

Art Unit: 2156

Figs. 2, 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message in responding to the request message in which server program unit performs and controls operations on vendor management data comprising of various databases), and

“wherein , in any other cases, the processing control means restores the database to a state before the database operation processing is first activated by the application processing included in the processing group” (See col. 70, lines 53-63 where user software or user identification is compared to vendor management data to determine if the record has been changed).

As per claim 8, Nakagawa teaches a database operating device according to claim 5, “wherein, when the database operation processing activated by the application processing included in the processing group fails, the processing control means restores the database to a state before the database operation processing is first activated by the application processing included in the processing group” (See Figs. 2, 16 and col. 58, lines 8-29 where client program unit is activated to generate software distributed/maintenance request message to activate a server program unit for generating and sending to the client program unit an answer message in responding to the request message in which server program unit performs and controls operations on vendor management data comprising of various databases).

As per claims 10 and 11, the claims are directed to a database operating method of operating a database through processing divided into multiple layers, the processing being one or both of activating processing, which activates processing of another layer, and activated processing, which is activated by the activating processing, one or more of the activated processing operating the database, comprising steps performed by the device of **claims 1 and 2, respectively and sequential corresponding**, and therefore rejected along the same rationale for rejecting its respective counterpart claims.

As per claims 13, 14, 15, 17, 18, 19 and 20, the claims are directed to a program for a database operating device for operating a database through processing divided into multiple layers, the processing being one or both of activating processing, which activates processing of another layer, and activated processing, which is activated by the activating processing, one or more of the activated processing being database operation processing for operating the database, where the program causes a computer to execute by the device of **claims 1, 2, 3, 5, 6, 7 and 8, respectively and sequential corresponding**, and therefore rejected along the same rationale for rejecting its respective counterpart claims.

As per claim 12, the claim is directed to an information processing method for performing given information processing through processing divided into multiple layers, the processing being one or both of activating processing, which activates processing of another layer, and activated processing, which is activated by the activating processing

Art Unit: 2156

performed by the device of **claim 9**, and therefore rejected along the same rationale for rejecting its respective counterpart claim.

As per claim 21, the claim is directed to a program of an information processing device for performing given information processing through processing divided into multiple layers, the processing being one or both of activating processing, which activates processing of another layer, and activated processing, which is activated by the activating processing, wherein the program causes a computer to execute by the device of **claim 9**, and therefore rejected along the same rationale for rejecting its respective counterpart claim.

As per claims 23 and 24, the claims are directed to the same subject matter as described in claims **2 and 3, respectively and sequential corresponding**, and therefore rejected along the same rationale for rejecting its respective counterpart claims.

As per claims 25, 26 and 27, the claims are directed to a program for a database operating device for operating a database through processing divided into multiple layers, the processing being one or both of activating processing, which activates processing of another layer, and activated processing, which is activated by the activating processing, one or more of the activated processing being database operation processing for operating the database, where the program causes a computer

Art Unit: 2156

to execute by the database operating device of claims **22, 23 and 24, respectively and sequential corresponding**, and therefore rejected along the same rationale for rejecting its respective counterpart claims.

Conclusions

9.1. The prior art made of record

A. U.S. Patent 5,835,911

9.2. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

B. U.S. Patent Application Publication 2001/0011301

C. U.S. Patent 5,835,911

D. U.S. Patent 6,591,290

Contact Information

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to KUEN S. LU whose telephone number is (571)-272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Pierre Vital can be reached on (571)-272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 Published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2156

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Art Unit 2156

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